

U.S. Foreign Trade Associated With U.S. Multinational Companies

THIS article analyzes data for 1966 and 1970 on the U.S. merchandise trade associated with 298 U.S. multinational companies (MNCs) that responded to a special survey taken by the Bureau of Economic Analysis. U.S. trade associated with the multinational companies is defined to consist of export and import transactions between the U.S. parent companies and their majority-owned foreign affiliates, between other U.S. residents and these same foreign affiliates, and between the U.S. parent companies and unaffiliated foreign residents.¹

The primary purpose of the article is to present the facts about MNC trade in an organized way. The magnitude of, and the changes in, MNC trade over the 1966-70 period are discussed and some of the more obvious factors which may have influenced that trade are pointed out. The article is not addressed to the fundamental question of whether foreign direct investment was beneficial or detrimental to U.S. trade during this period.

In particular, the data on total U.S. trade and on U.S. trade associated with the multinational companies in 1966 and 1970, were collected, *given the existence of U.S. foreign direct investment abroad* and all the other developments that affected trade. These data, by themselves, do not permit us to determine whether, *in the absence of U.S. direct investment abroad*, total U.S. exports and/or imports would have

been greater or less than they actually were. Identification of the actual magnitudes involved in MNC trade is only the first step in that determination.

The special survey was conducted in order to obtain current information on the domestic and international operations of U.S. multinational companies. It covers 298 U.S. direct investors and their 5,237 majority-owned foreign affiliates. The basic data obtained from the special survey, supplemented by information from BEA's 1966 benchmark survey of direct investments abroad,² are given in a publication recently released by the Bureau of Economic Analysis, entitled *Special Survey of U.S. Multinational Companies, 1970*.³ The data on MNC trade used in the text and tables of the present article are drawn from this primary source.

Some major findings based on the MNC trade data from the special survey are:

1. In 1970, the exports and the imports associated with the 298 MNCs in the sample were a sizable proportion of total U.S. merchandise exports and imports—51 percent and 34 percent, respectively.

2. The trade surplus associated with the sample MNCs increased significantly from 1966 to 1970, while the surplus on total U.S. trade declined.

2. See Bureau of Economic Analysis, *U.S. Direct Investments Abroad, 1968, Part II, Group 1, 2, and 3*, available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161, at \$8 for each of three volumes. Accession numbers are COM 72-10097, 72-10098, 72-10099, respectively.

3. *Special Survey of U.S. Multinational Companies, 1970* can be purchased from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Price \$8. Quote accession number COM-72-11892 when ordering.

3. Most of the strength in the MNC-associated surplus was in trade between U.S. parent companies and unaffiliated foreign residents. U.S. reporters' exports to unaffiliated foreigners rose 48 percent while their imports from unaffiliated foreigners rose 46 percent from 1966 to 1970. The increase in the surplus on U.S. trade with majority-owned foreign affiliates was relatively small, as exports to the affiliates increased at a slower pace than imports from them. The rapid rise in imports from majority-owned foreign affiliates at least partly reflected the impact of the U.S.-Canadian automotive trade agreement and the exceptional growth in U.S. demand for petroleum.

4. By industry, trade associated with MNCs in manufacturing accounted for an overwhelming share of all MNC trade in both 1966 and 1970. Exports associated with manufacturing MNCs rose more slowly from 1966 to 1970, but by a larger dollar amount, than imports associated with them. The surplus on trade of the manufacturing MNCs in 1970 was about equal to the total trade surplus of all MNCs in the sample.

5. By area, MNC-associated exports grew faster than total U.S. exports to the developed areas, but slower than total U.S. exports to other areas.

Previous articles in the *SURVEY OF CURRENT BUSINESS* have presented data on all MNC-associated exports (May 1969 issue) but on only a portion of MNC-associated imports, i.e., only sales by foreign affiliates to the United States (October 1970 issue). The present article gives data on all identifiable MNC-associated imports, as well as exports, for a sample of large multi-

1. Minority-owned foreign affiliates are treated in the text of this article as though they were unaffiliated foreign residents. U.S. trade associated with the multinational companies, as defined here, is often referred to in this article simply as "MNC trade" or "MNC-associated trade."

national companies. It also integrates the data on both MNC-associated exports and imports into a single discussion. The methodology used and the

statistical problems encountered in compiling the data on MNC trade are summarized in the Technical Note at the end of this article.

nearly 60 percent of the increase in total U.S. exports and for about 35 percent of the increase in total U.S. imports over this period.

Since the dollar increase in MNC-associated exports was greater than that in MNC-associated imports, the surplus on trade of the MNCs in the sample rose \$2.3 billion, from \$5.3 billion in 1966 to \$7.6 billion in 1970. The surplus on all U.S. trade, on the other hand, deteriorated by \$1.7 billion over the same period. Thus, the surplus on "residual U.S. trade," that is, trade not associated with the sample MNCs, deteriorated by nearly \$4.0 billion.

The better-than-average trade performance of the MNCs during the 1966-70 period may reflect the competitive strength of the MNCs in U.S. and foreign markets, irrespective of any effects their foreign direct investments per se may have had on U.S. trade. Many of the 298 U.S. firms that reported in the survey are among the largest and most technologically advanced U.S. firms. As a result, their domestic production is probably highly competitive with the production of other U.S. and foreign firms. They may very well have a competitive advantage in international trade for this reason, irrespective of the impact on trade of their foreign direct investments.

It should also be noted that the data on MNC-associated exports and imports from the special survey are affected by the prevailing processing

Comparison of MNC Trade With Total U.S. Trade

Companies in the sample

Trade associated with the 298 multinational companies in the sample accounted for a sizable proportion of total U.S. trade in 1966 and 1970. In 1970, MNC-associated exports were \$21.2 billion, or 51 percent of total U.S. exports, and MNC-associated imports were \$13.6 billion, or 34 percent of total U.S. imports (table 1). In 1966, the corresponding percentage for MNC-associated exports was somewhat lower—47 percent of the U.S. total—but the percentage for MNC-associated imports was 33 percent, about the same as in 1970.

The data on total U.S. trade in this article have been adjusted to a balance of payments basis, excluding military transactions. This basis is the one most conceptually comparable, although not identical, to that used in collecting the MNC trade data. Problems of comparability may still exist because of differences in the timing, valuation, and

definition of the transactions covered in the two sets of data (see Technical Note).

Total U.S. trade and U.S. trade associated with the sample MNCs were undoubtedly affected by cyclical developments here and abroad. However, cyclical factors probably affected total and MNC trade in the same direction at least, so that the influence of these factors on comparisons of total trade with MNC trade is probably not great.

The increase in the share of MNC-associated exports in total U.S. exports from 1966 to 1970 reflected the fact that MNC-associated exports rose significantly faster than total U.S. exports. U.S. exports associated with the MNCs in the sample increased by \$7.5 billion or 55 percent, compared with a 43 percent rise in total U.S. exports. At the same time, MNC-associated imports rose \$5.2 billion or 61 percent, somewhat faster than the 56 percent increase in total U.S. imports. In dollar terms, the MNCs in the sample accounted for

Table 1.—Total U.S. Trade and Trade Associated With U.S. Multinational Companies

Line		1966			1970			Change, 1966-70						
		Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports		
		Millions of dollars											Percent	
1	Total U.S. trade ¹	23,287	25,463	2,824	41,458	23,739	2,164	12,678	14,396	-1,699	43.3	56.3		
2	U.S. trade associated with multinationals in sample ²	13,725	8,435	4,291	21,228	13,606	7,619	7,503	5,174	2,329	54.7	61.3		
3	Other U.S. trade (residual).....	14,661	17,028	-1,467	20,735	26,190	-5,455	5,174	9,162	-3,988	33.2	58.8		
4	U.S. trade associated with multinationals not in sample ³	4,460	3,273	1,187	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
5	U.S. trade not associated with any multinational.....	10,101	11,795	-1,694	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
6	Addendum:													
	U.S. trade associated with all multinationals (line 2+line 4) ⁴	18,185	11,708	7,478	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		

¹Imports of U.S. reporters not in sample from unaffiliated foreign residents were estimated. n.a. Not available.

²Adjusted to balance of payments basis; excludes exports under U.S. military agency sales contracts and imports by U.S. military agencies. See SURVEY OF CURRENT BUSINESS, June 1972, page 26.

³Data are from Bureau of Economic Analysis, Special Survey of U.S. Multinational Companies, 1970, table 6.

⁴Data for all 8,300 U.S. reporters are from Bureau of Economic Analysis, U.S. Direct Investments Abroad, 1966, Part II, Group 1, 2, and 3. Source: U.S. Department of Commerce, Bureau of Economic Analysis.

and distribution channels through which exported or imported goods pass, and any shifts in these channels would have influenced the reported changes in MNC-associated trade from 1966 to 1970. For example, trade of U.S. reporters in the MNC data cover those goods which were exported or imported directly by the reporters, regardless of whether the goods were originally produced or ultimately used by them. Goods exported or imported by other U.S. residents but which, at some point, entered into the production or distribution processes of the reporter are not included in exports or imports of the U.S. reporters.

In particular, exports of U.S. reporters, as defined in the MNC data, include goods produced by other U.S. residents which were subsequently purchased and exported by the reporters, with or without further processing. They exclude goods produced by the reporters which were subsequently purchased and exported by other U.S. residents. (A good part of the latter type of exports consists of goods charged to the Department of Defense, which is considered a U.S. resident; for greater comparability with the data on MNC-associated exports, such goods have also been excluded from the data on total U.S. exports.) Likewise, imports of the U.S. reporters in the MNC data include goods imported by the reporters which were later sold to other U.S. residents with or without further processing, but exclude (possibly large amounts of) goods imported by other U.S. residents which were later purchased by the reporters.

Trade associated with the reporters' majority-owned foreign affiliates is defined similarly to consist of those goods which were exported to the United States or imported from the United States directly by the affiliates; goods exported or imported by other foreigners but which entered into the production or distribution processes of the affiliates are not included in trade associated with the affiliates.

The direct investment universe

The sample data on MNC trade cited above cover only the 298 re-

spondents to the BEA special survey. For 1966, however, data on the trade associated with the universe of all MNCs were collected in the BEA benchmark survey of U.S. direct investments abroad, to which response was mandatory. Trade associated with the full benchmark universe of MNCs accounted for 66 percent of total U.S. exports and 46 percent of total U.S. imports in 1966, with an estimated surplus in that year of \$7.5 billion (table 1, line 6). In contrast, a deficit of \$3.7 billion was recorded in 1966 on other U.S. trade, i.e., trade not identifiably associated with any MNC.

The 298 U.S. reporters in the special survey and their 5,237 majority-owned foreign affiliates represent a very small proportion of the 3,300 U.S. foreign direct investors and 23,000 foreign affiliates in the benchmark universe. However, the sample MNCs accounted for a substantial part of the U.S. exports and imports—somewhat over 70

percent of each—associated with all MNCs in the benchmark universe in 1966.

The trade associated with the sample MNCs in 1966, moreover, seems fairly representative of the MNC universe in terms of composition by industry of the U.S. reporter and by geographical area. However, it is quite possible that the sample is less representative of the universe in terms of growth patterns from 1966 to 1970; the sample is composed primarily of large companies and it is possible that trends over time in the trade of these large companies differ considerably from those of the smaller companies in the universe. Generalizations about the growth in trade of the MNC universe, based on the growth in trade of the MNC sample, may thus be misleading.

The remainder of this article focuses on the U.S. trade associated with the 298 MNCs in the sample.

MNC Trade, by Transactors, by Industry of U.S. Reporter, and by Area

Trade by transactors

Of all U.S. exports associated with the sample MNCs in 1970, 54 percent were exports by U.S. reporters to unaffiliated foreigners, 41 percent were exports by U.S. reporters to their own majority-owned foreign affiliates (MOFAs), and only a small percentage were exports by other U.S. residents to those same MOFAs. Imports by U.S. reporters from unaffiliated foreigners, and from their own MOFAs, each accounted for roughly 45 percent of all imports associated with the sample MNCs in 1970; the remaining 10 percent were imports of other U.S. residents from majority-owned foreign affiliates. The relatively small size of imports by other U.S. residents from the MOFAs may result from the affiliates' tendency to sell their goods to their U.S. parents for subsequent distribution in the United States rather than acting themselves as distributors of these goods.

The surplus on trade between the 298 U.S. reporters and unaffiliated foreign residents increased \$1.8 billion from 1966 to 1970, accounting for roughly three-fourths of the \$2.3 billion total increase in the trade surplus of the sample (table 2). U.S. reporters' exports to unaffiliated foreigners rose 43 percent, while their imports from unaffiliated foreigners rose 46 percent. In contrast, exports to the MOFAs by both U.S. reporters and other U.S. residents increased more slowly than imports from the MOFAs. Thus, the surplus on trade between the U.S. reporters and their own MOFAs rose only \$0.8 billion and the balance on trade of other U.S. residents with these same MOFAs deteriorated by \$0.3 billion to a small deficit in 1970.

Impact of the United States-Canadian automotive agreement

One major factor that was partly responsible for the relatively weak

showing on U.S. reporters' trade with majority-owned foreign affiliates was the 1966 United States-Canadian automotive agreement. This had a large adverse impact on the U.S. trade balance with majority-owned Canadian affiliates of U.S. auto companies.

The agreement has resulted in the increased specialization of automobile production in both the United States and Canada which, in turn, has led to an accelerated flow of automotive trade across the border in both directions. Exports by U.S. reporters in the transportation equipment industry to their majority-owned affiliates in Canada rose \$1.0 billion, or 94 percent, from 1966 to 1970. However, imports by U.S. reporters from their Canadian MOFAs in the transportation equipment industry increased even faster—by \$1.5 billion or 183 percent—so that the balance on this trade moved adversely by over \$0.5 billion.

The balance on total U.S. automotive trade with Canada also was affected by the agreement. This balance deteri-

orated by \$1.1 billion from 1966 to 1970, compared to the \$0.5 billion deterioration on trade between U.S. reporters and their Canadian MOFAs in the transportation equipment industry. However, these two figures are not strictly comparable for a number of reasons: (1) The total trade data are broken down by commodity, whereas the MNC data are broken down by industry of the transactors involved—regardless of the actual types of goods being traded; (2) the MNC data are for the transportation equipment industry as a whole; this could include more than just the automotive industry, although transportation equipment MNCs with MOFAs in Canada appear to be predominantly automotive; (3) the data on total U.S. automotive trade themselves may be incomplete relative to the MNC data; recent evidence indicates that U.S. automotive exports in the total U.S. trade figures have been underreported, thus exaggerating the unfavorable shift in the overall trade balance; and (4) there may be other

statistical or reporting differences between the MNC and total U.S. trade figures (see Technical Note). The remaining unexplained deterioration in the total U.S. automotive trade balance with Canada may reflect transactions other than between U.S. reporters and their Canadian MOFAs, including transactions between the U.S. reporters and unaffiliated foreigners.

Impact of U.S. demand for oil

Another major factor bearing on the weaker showing of the U.S. reporters' trade with majority-owned foreign affiliates relative to their trade with unaffiliated foreigners in 1966-70 was the exceptional growth in U.S. demand for oil. This prompted substantial increases in petroleum imports from the foreign affiliates of U.S. oil companies.

Imports by petroleum reporters from their MOFAs rose 84 percent from 1966 to 1970, as the amount of petroleum imports allowed into the United States under quota was increased in response

Table 2.—U.S. Trade Associated With U.S. Multinational Companies in Sample,¹ by Transactors and by Domestic Industry of U.S. Reporter

Line		1966			1970			Change, 1966-70					
		Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	
		Millions of dollars										Percent	
1	Total U.S. trade associated with multinationals in sample.....	34,736	8,436	5,291	33,235	13,669	7,489	7,502	6,174	2,329	54.7	61.3	
	By transactors:												
2	U.S. reporters with own majority-owned foreign affiliates (MOFAs).....	5,036	2,433	1,606	5,623	5,244	2,379	3,585	2,811	774	71.2	81.6	
3	Other U.S. residents with MOFAs ²	1,002	322	180	1,300	1,279	-79	198	457	-259	19.8	55.6	
4	U.S. reporters with other foreigners ³	7,987	4,190	3,507	11,406	6,067	5,315	3,713	1,907	1,811	68.4	45.6	
	By industry of U.S. reporter:												
5	Associated with U.S. manufacturing multinationals.....	10,796	5,707	4,029	17,046	9,204	7,467	6,814	3,554	3,238	58.8	64.6	
6	U.S. reporters with own MOFAs.....	4,206	2,141	2,047	7,079	4,153	2,925	2,871	1,092	879	69.2	92.2	
7	Other U.S. residents with MOFAs ²	763	426	235	965	685	269	143	215	-77	18.8	49.4	
8	U.S. reporters with other foreigners ³	5,786	3,121	2,647	9,008	4,406	4,463	2,800	1,484	1,316	57.2	47.5	
9	Associated with U.S. petroleum multinationals.....	957	2,007	-1,050	1,338	3,774	-1,935	322	1,267	-945	29.0	63.1	
10	U.S. reporters with own MOFAs.....	373	1,074	-696	553	1,976	-1,423	175	903	-727	46.3	84.0	
11	Other U.S. residents with MOFAs ²	157	205	-139	101	369	-267	34	97	-63	21.7	32.8	
12	U.S. reporters with other foreigners ³	423	627	-214	565	605	-310	172	268	-96	40.7	42.1	
13	Associated with U.S. multinationals in other industries.....	2,033	721	1,312	2,599	942	1,897	806	221	585	29.6	30.7	
14	U.S. reporters with own MOFAs.....	451	198	253	991	115	375	640	-55	623	119.7	-41.9	
15	Other U.S. residents with MOFAs ²	85	101	-16	107	282	-145	33	151	-123	35.9	149.6	
16	U.S. reporters with other foreigners ³	1,498	422	1,076	1,741	576	1,163	543	184	89	16.2	35.5	

1. Data are from Bureau of Economic Analysis, *Special Survey of U.S. Multinational Companies*, 1970, table 6.

2. Also may include trade of a U.S. reporter with the majority-owned foreign affiliates of other U.S. reporters. Excludes U.S. goods charged or billed to a majority-owned foreign affiliate but shipped to other foreigners.

3. Exports to other foreigners include exports charged (billed) by U.S. reporters and other U.S. residents to the covered majority-owned foreign affiliates, but shipped to other foreigners. NOTE.—Details may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

to the rise in domestic demand and as imports of certain petroleum products not subject to quotas were expanded. The balance on trade between U.S. petroleum reporters and their MOFAs deteriorated by \$0.7 billion, while the balance on other trade associated with petroleum MNCs deteriorated by \$0.2 billion.

In view of the rapid growth in domestic demand for petroleum, the large increases in petroleum imports in this period would probably have occurred even in the absence of U.S. direct investments in petroleum-producing affiliates abroad. Thus, if such direct investments had been smaller, U.S. petroleum imports from MOFAs would also have been smaller, but U.S. petroleum imports by the reporters from unaffiliated foreigners might well have been larger than they actually were. Given the increase in domestic demand for petroleum and the liberalization of oil import quotas, all MNC-trade and total U.S. trade might not have been much different with or without the foreign direct investments.

Trade by industry of U.S. reporter

When MNC trade is classified by the domestic industry of the U.S. reporter,

all trade associated with the reporter or its MOFAs is assigned to the major industry of that reporter's fully consolidated domestic operations. This industry may differ from that of the products actually being traded, from that of the reporter's foreign affiliates and—in trade between the U.S. reporter and unaffiliated foreigners or between other U.S. residents and the reporter's MOFAs—from that of the unaffiliated foreign or U.S. residents involved.

In terms of the domestic industry of the U.S. reporter, MNCs in manufacturing dominate MNC trade. In 1970, manufacturing MNCs accounted for 80 percent of all MNC-associated exports reported by the sample companies and for 69 percent of all MNC-associated imports. Exports associated with the manufacturing MNCs rose more slowly but by a larger dollar amount, than imports associated with them from 1966 to 1970. The surplus on trade of the manufacturing MNCs was \$7.7 billion in 1970, an improvement of \$2.6 billion from 1966 (table 2). Most of this improvement was in trade between U.S. manufacturing reporters and unaffiliated foreign residents; the improvement in trade with majority-owned foreign

affiliates was relatively small, partly because of the negative impact of the United States-Canadian automotive pact.

MNCs in the petroleum industry accounted for only 6 percent of MNC-associated exports in 1970, but for 24 percent of MNC-associated imports. The trade deficit associated with the petroleum MNCs worsened from \$1.0 billion in 1966 to \$1.9 billion in 1970, as exports associated with the petroleum MNCs rose only \$0.4 billion or 40 percent while imports associated with them rose \$1.3 billion or 63 percent. The rise in imports was largely from majority-owned foreign affiliates.

The deficit on trade associated with the petroleum MNCs was about equal in 1970 to the net surplus on trade associated with MNCs in "other industries," which include mining, smelting, trade, and other services. Exports associated with the "other industries" group rose 40 percent from 1966 to 1970, compared with the 31 percent rise in the imports associated with them. In 1970, MNCs in these other industries together accounted for 13 percent of MNC-associated exports and 7 percent of MNC-associated imports.

Table 2.—Comparison of Growth in Total U.S. Exports With Growth in U.S. Exports Associated With Multinational Companies (MNCs) in Sample, by Area of Ultimate Destination

Line	Area of ultimate destination	1966		1970		Change, 1966-70			
		Total U.S. exports ¹	MNC-associated exports ²	Total U.S. exports ¹	MNC-associated exports ²	Total U.S. exports	MNC-associated exports	Total U.S. exports	MNC-associated exports
		Millions of dollars						Percent	
1	All areas.....	29,287	12,726	41,963	21,228	12,676	7,502	43.3	64.7
2	Developed areas.....	19,369	8,639	29,594	15,251	9,544	6,412	49.3	72.5
3	Canada.....	9,726	3,224	9,040	4,042	2,304	1,708	24.2	52.5
4	Europe.....	9,746	4,212	14,535	7,481	4,790	3,248	49.2	77.1
5	United Kingdom.....	1,756	791	2,519	1,555	751	554	43.3	71.8
6	European Economic Community.....	5,374	2,400	8,261	5,731	2,937	1,831	55.6	85.5
7	Other Europe ³	2,618	1,023	3,555	2,575	1,062	1,852	59.9	132.2
8	Japan.....	2,545	793	4,545	1,906	2,303	1,116	88.2	140.0
9	Australia, New Zealand, and South Africa.....	1,184	600	1,551	941	447	341	38.4	56.8
10	Other areas.....	9,227	4,888	21,189	5,977	2,322	1,689	28.4	21.3
11	Latin America.....	4,718	2,156	6,521	3,181	1,723	1,025	37.8	47.5
12	Other Africa, Middle East, and other Far East.....	4,609	(D)	5,658	2,796	1,049	(D)	22.8	(D)
13	International and unallocated.....		(D)		706		(D)		(D)

(D) Suppressed to avoid disclosure of data for individual reporters.
1. Adjusted to balance of payments basis; excludes exports under U.S. military agency sales contracts and imports of U.S. military agencies. Total for all areas in 1966 and all 1970 data are as published in the *Survey of Current Business*, June 1972, table 8, pages 44-51. Area detail for 1966 has been revised by the Bureau of Economic Analysis since it was last published in the *Survey of Current Business*, June 1970, table 8, pages 44-51.

2. Area detail for MNC-associated exports is from Bureau of Economic Analysis, *Special Survey of U.S. Multinational Companies*, 1970, tables 2 and 4.
3. Includes Eastern Europe.
NOTE.—Details may not add to totals because of rounding.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Reports by area

A geographic breakdown of all U.S. imports associated with the MNCs in the sample cannot be made because data on the U.S. reporters' imports from unaffiliated foreigners, which were collected for the first time in the special survey, were reported only in aggregate, not for individual areas. However, area detail is available for all U.S. exports associated with the sample MNCs (table 3).

Of the total \$21.2 billion of MNC-associated U.S. exports in 1970, \$15.3 billion or 72 percent went to the developed areas and \$6.0 billion or 28 percent went to other areas. The corresponding percentages in 1966 were 64 percent and 36 percent, respectively. The rise in the share of developed areas and the decline in the share of other areas from 1966 to 1970 reflected the fact that, during this period, MNC-associated exports to the developed areas increased 72 percent, while those to other areas increased only 22 percent.

The distribution of total U.S. exports between developed and other areas was

about the same as that of the MNC sample in 1970. However, the 1966-70 growth pattern, by area, of MNC-associated exports differed considerably from that of total U.S. exports. In

general, MNC-associated exports grew significantly faster than total U.S. exports to the developed areas, but somewhat slower than total U.S. exports to other areas.

U.S. Trade with Majority-Owned Foreign Affiliates**Trade by area and by industry of U.S. reporter**

Although area detail for all MNC-associated imports is not available from the special survey, breakdowns are available by area and by industry of the U.S. reporter for both exports to, and imports from, majority-owned foreign affiliates (table 4). Trade with majority-owned foreign affiliates consists of transactions between U.S. reporters and their own MOFAs and transactions between other U.S. residents and these same MOFAs.

U.S. exports to MOFAs in the sample totaled \$9.8 billion in 1970, of which 82 percent was to developed areas. U.S. imports from MOFAs totaled \$7.5 billion, of which 67 percent was from developed areas. From 1966 to 1970, imports from MOFAs in developed areas increased faster, although by a smaller dollar amount, than exports to them; for trade with MOFAs in other areas, the reverse was true.

U.S. trade with majority-owned foreign affiliates in all areas showed a surplus of \$2.3 billion in 1970, up \$0.5 billion from 1966. The surplus on trade

Table 4.—U.S. Trade With Majority-Owned Foreign Affiliates (MOFAs) in Sample, by Area and Domestic Industry of U.S. Reporter

Line	Area and domestic industry of U.S. reporter	1966			1970			Change, 1966-70					
		Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	Trade balance	Ex-ports	Im-ports	
		Millions of dollars									Percent		
1	All areas.....	6,940	4,256	1,785	9,823	7,823	2,000	3,783	3,367	515	61.4	76.8	
	By domestic industry of U.S. reporter:												
2	Associated with MOFAs of U.S. manufacturing multinationals (MNCs).....	4,066	2,666	2,382	7,983	4,787	3,194	3,014	2,201	813	60.7	35.1	
3	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	1,071	1,689	-618	1,843	2,326	-483	771	1,066	-295	71.0	62.0	
	By area:												
4	Developed areas.....	4,668	2,444	2,224	8,687	6,045	2,642	3,199	2,681	518	61.9	106.4	
5	Associated with MOFAs of U.S. manufacturing MNCs.....	4,185	2,084	2,101	8,775	4,900	3,875	2,810	2,176	634	62.7	107.5	
6	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	684	421	273	1,282	947	335	588	426	162	84.7	101.2	
7	Of which, Canada.....	2,543	1,867	676	3,881	4,185	-304	1,348	2,318	-970	63.0	124.1	
8	Associated with MOFAs of U.S. manufacturing MNCs.....	2,427	1,645	782	3,746	3,886	-140	1,321	1,861	-540	84.4	112.1	
9	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	117	223	-106	143	679	-536	26	458	-432	22.2	204.5	
10	Of which, Europe ²	1,793	994	1,289	3,329	787	2,542	1,536	263	1,273	81.3	92.2	
11	Associated with MOFAs of U.S. manufacturing MNCs.....	1,378	341	1,037	2,396	801	1,595	1,023	268	755	74.4	76.2	
12	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	415	153	256	932	186	746	544	3	541	130.1	3.8	
13	Other areas.....	1,182	1,812	-630	1,796	2,478	-712	584	686	-102	46.4	24.7	
14	Associated with MOFAs of U.S. manufacturing MNCs.....	804	884	-240	1,208	560	648	404	26	378	80.2	4.6	
15	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	378	1,250	-872	588	1,889	-1,299	181	659	-478	47.8	51.1	
16	Of which, Latin America.....	858	1,384	-527	1,166	1,366	-210	812	100	712	30.6	7.8	
17	Associated with MOFAs of U.S. manufacturing MNCs.....	683	448	235	918	402	516	285	-28	313	34.4	-8.6	
18	Associated with MOFAs of U.S. MNCs in petroleum and other industries.....	175	529	-354	248	979	-731	78	186	-108	45.9	16.6	

1. Exports are from Bureau of Economic Analysis, Special Survey of U.S. Multinational Companies, 1970, table 2, and unpublished data; imports are from unpublished data only.

2. Includes Eastern Europe.

NOTE.—Details may not add to totals because of rounding.
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

with MOFAs in developed areas improved by \$0.6 billion from 1966 to 1970, as a large increase in the surplus with Europe was partly offset by a deterioration in the balance with Canada. Over half of that deterioration was associated with manufacturing MNCs, partially reflecting the impact of the United States-Canadian automotive agreement. The deficit on trade with MOFAs in other areas worsened slightly from 1966 to 1970, as a decrease in the trade deficit with Latin America was more than offset by an increase in the deficit with other non-developed areas. The latter increase was wholly in trade associated with MNCs in the "petroleum and other industries" group.

Exports by intended use

Total exports to the majority-owned foreign affiliates in the sample were \$9.8 billion in 1970, of which \$5.1 billion, or slightly more than half, were for resale without further manufacture or for lease or rental abroad. Less than 5 percent was capital equipment exported for use by the foreign affiliates. The remainder consisted of exports of materials and parts for further processing

or assembly by the foreign affiliates, and all other exports, such as repair parts and operating supplies for use by the affiliates (table 5).

The \$5.1 billion of exports to MOFAs for resale, lease, or rental abroad were probably for the most part distributed by the affiliates to unaffiliated foreign customers. In addition, the U.S. reporters exported \$11.4 billion of goods directly to unaffiliated foreign residents in 1970 (table 2, line 4). Thus, the total amount of MNC-associated exports that reached unaffiliated foreign customers with little or no further processing by the affiliates was about \$16.5 billion. Majority-owned foreign affiliates were the distribution channel for 31 percent of this total; in 1966, the corresponding figure was 27 percent.

The \$5.1 billion of exports to MOFAs reported as being for resale, lease, or rental abroad are valued at the selling prices charged by the U.S. parent companies to their affiliates, not the prices charged by the affiliates to foreign customers. Thus, profit and commission on sales are excluded. In contrast, the \$11.4 billion of exports by U.S. reporters to unaffiliated foreigners probably include profit and commission. As a consequence, the importance of

the MOFAs as distributors of U.S. exports may be understated.

Exports of capital equipment for use by foreign affiliates were only \$430 million in 1970, a decline of nearly \$100 million from 1966. However, both the 1966 and 1970 data may be incomplete. The data on U.S. trade with foreign affiliates were generally reported by the U.S. parent companies which may have been unaware of some goods purchased by their affiliates from other U.S. suppliers. The understatement in the case of U.S. capital equipment exports for use by the affiliates may be especially serious since the proportion of such exports which is shipped by U.S. suppliers other than the reporters is relatively large.

Other exports to MOFAs, mainly for further processing or assembly abroad, totaled \$4.3 billion in 1970, compared with \$2.6 billion in 1966. The proportion of such exports which went to affiliates in the transportation equipment industry in Canada rose from 34 percent in 1966 to 39 percent in 1970, in part reflecting the impetus given by the United States-Canadian automotive pact.

In both 1966 and 1970, over 85 percent of the exports to MOFAs for

Table 5.—U.S. Exports to Majority-owned Foreign Affiliates in Sample, by Area and by Intended Use¹

Line	Intended use	1966			1970			Change, 1966-70					
		All areas	Developed areas	Other areas	All areas	Developed areas	Other areas	All areas	Developed areas	Other areas	All areas	Developed areas	Other areas
Millions of dollars													
1	Total exports to majority-owned foreign affiliates ²	6,640	4,333	1,182	4,323	4,437	1,766	3,733	3,199	584	52.5	65.9	48.4
2	Shipped by U.S. reporters ³	5,088	4,096	940	4,623	7,118	1,505	3,585	3,023	585	71.2	73.7	50.1
3	Shipped by other U.S. suppliers.....	1,002	788	242	1,200	939	261	168	179	19	16.8	23.6	7.9
4	For resale without further manufacture or for lease or rental abroad.....	3,341	2,446	395	5,087	4,431	636	2,216	1,975	241	78.0	80.7	61.0
5	Shipped by U.S. reporters ³	2,677	2,317	339	4,908	4,287	824	2,231	1,970	261	82.5	85.0	72.7
6	Shipped by other U.S. suppliers.....	165	127	26	149	134	14	-14	7	-23	-8.6	5.5	-61.1
7	Capital equipment for use by foreign affiliates.....	523	283	241	480	307	223	-43	-75	-18	-17.9	-26.6	-7.5
8	Shipped by U.S. reporters ³	230	104	124	330	91	139	0	-15	15	4	-14.2	12.1
9	Shipped by other U.S. suppliers.....	293	179	116	150	116	34	-93	-60	-32	-21.3	-34.1	-27.6
10	For further processing or assembly, and other.....	2,620	2,075	545	4,318	3,456	362	1,666	1,368	317	64.5	64.5	58.2
11	Shipped by U.S. reporters ³	2,074	1,619	456	2,455	2,768	399	1,392	1,147	245	67.1	70.5	58.3
12	Shipped by other U.S. suppliers.....	546	456	90	863	689	163	306	221	72	56.0	51.1	31.7

1. Data for total exports to majority-owned foreign affiliates, and for all areas by intended use, are from Bureau of Economic Analysis, *Special Survey of U.S. Multinational Companies, 1970*, tables 2 and 3; area detail by intended use is from unpublished data.

2. The details by intended use do not add to total exports to majority-owned foreign affiliates because of statistical discrepancies. The detail data are as reported on the books of the foreign affiliates while the totals are as reported on the books of the U.S. parent. For all areas combined, the sum of the details by intended use is \$90 million less in 1966, and \$19

million less in 1970, than the total shown in line 1. Details may also not add to totals because of rounding.

3. Includes goods charged on the books of U.S. reporters and shipped to their own majority-owned foreign affiliates, whether such goods were actually produced by the U.S. reporters or by other U.S. suppliers.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

resale, lease, or rental abroad, and about 80 percent of the exports for further processing or assembly abroad, were shipped to developed areas. Ex-

ports of capital equipment for use by the MOFAs were about evenly divided between developed areas and other areas in both years.

Technical Note

General sources

All 1970 data on U.S. imports and exports associated with the 298 multinational companies in the sample were obtained from Forms BE-11A and 11B "Confidential Special Survey of Multinational Companies, 1970," of the Bureau of Economic Analysis. The survey, which was voluntary, was conducted in late 1971.

Data on the U.S. reporters' imports from unaffiliated foreign residents in 1966 were also obtained from the special survey. However, data on other MNC-associated imports and all data on MNC-associated exports in 1966 were obtained from the 1966 mandatory benchmark survey of U.S. direct investments abroad. The data drawn from the 1966 benchmark survey are for the same group of enterprises that were included in the 1970 special survey, but are as reported by them in the benchmark survey.⁴ No attempt was made to expand the sample survey data to universe totals.

All data on total U.S. exports and imports for 1966 and 1970 are as published in the June 1972 issue of the SURVEY (pages 30, 46-51), except for the area breakdown of total U.S. exports. This breakdown has been revised by BEA since it was last published in the June 1970 issue of the SURVEY. Total U.S. exports and imports are on a balance of payments basis, excluding military; total U.S. exports exclude exports under military agency sales contracts and under military grant-aid programs, and total U.S. imports exclude imports of U.S. military agencies.

Definition of MNC-associated trade

MNC-associated trade is defined to consist of three components (table 2):

1. *Trade between U.S. reporters and their own majority-owned foreign affiliates:* Exports from U.S. reporters to their own MOFAs include goods charged (billed) on the books of U.S. reporters which were shipped to the reporters' own MOFAs, whether the goods were actually produced by the U.S. reporters or by other U.S. residents. Imports by U.S. reporters from their own MOFAs are derived from data on sales by the affiliates to U.S. reporters and include both goods and services; the service component, however, is believed to be quite small. It was assumed that all goods (or services) sold to U.S. reporters by the affiliates were in fact shipped to (or performed for) these reporters although a small amount of such goods (or services) may have been charged to the reporters but actually shipped (or performed) elsewhere.

2. *Trade between other U.S. residents and the U.S. reporters' majority-owned foreign affiliates:* This component of MNC-associated trade consists primarily of transactions between U.S. residents that were not in the sample and the MOFAs of the U.S. reporters. However, it also includes any transactions that may have occurred between one U.S. reporter and the majority-owned foreign affiliates of another U.S. reporter, since these transactions could not be separately identified in the survey data. Exports of other U.S. residents to the U.S. reporters' MOFAs do not include exports which were charged to the reporters' MOFAs on the books of other U.S. suppliers but which were in fact shipped to other foreign resi-

dents; such exports are included in the third component of MNC trade, below. Imports by other U.S. residents from the MOFAs are derived from affiliate sales data and include what is believed to be a small amount of services. It was assumed that all goods (or services) sold to other U.S. residents by the affiliates were actually shipped to (or performed for) these residents.

3. *Trade between U.S. reporters and other foreign residents:* This component of MNC-associated trade consists of the U.S. reporters' export and import transactions with foreigners other than their own majority-owned foreign affiliates, including transactions with unaffiliated foreigners and with minority-owned foreign affiliates of U.S. reporters. (In the text of this article, foreigners other than MOFAs were, for convenience, referred to as "unaffiliated foreigners," i.e., minority-owned foreign affiliates were treated as though they were unaffiliated foreign residents.) This component may also include a small amount of trade of U.S. reporters with majority-owned foreign affiliates of other U.S. reporters, duplicating some of the data included in component 2, above. Exports by U.S. reporters to other foreign residents include a very small amount of exports (\$6 million in 1966 and \$19 million in 1970) charged to MOFAs on the books of other U.S. suppliers but which were in fact shipped to other foreign residents.

Statistical and reporting problems

A number of statistical and reporting problems were encountered in compiling the data for this article. These problems may cause some distortion in comparisons between total U.S. trade and U.S. trade associated with the MNCs, although it appears unlikely that they would invalidate such comparisons.

The data on MNC-associated trade were reported by U.S. parent companies on the basis of entries made on their company records or on the records of their foreign affiliates. Total U.S. trade statistics, on the other hand, are

4. See Bureau of Economic Analysis, *Special Survey of U.S. Multinational Companies, 1970*, for a more detailed explanation of how this enterprise match was done.

derived from individual shippers' export declarations and from individual import documents, which are tabulated by the Census Bureau, on each foreign trade transaction. Because of such differences in data collection methods, differences between the two sets of data in the valuation, timing, and definition of the U.S. export and import transactions included are inevitable.

In the MNC data, for example, two different methods of valuation for imports were used. The value of U.S. imports from MOFAs reflects actual transactions prices as recorded on the books of the U.S. reporters and their foreign affiliates; the value of MNC-associated imports from unaffiliated foreigners reflects the value reported on the import entry form filed with the Bureau of Customs (usually an arms-length market price, f.o.b. country of origin). All data on total U.S. imports, with one exception, represent the statutory valuations required by U.S. Customs law. The one exception is in the case of U.S. automotive trade with Canada: imports of automotive products from Canada, adjusted to a balance of payments basis, represent actual transactions values. In general, actual transactions values probably tend to be less than the Customs values. As a result, MNC-associated imports may be understated relative to total U.S. imports in this article.

The timing of transactions included in the MNC data depends upon when a given transaction is entered on the books of the U.S. reporter or its foreign

affiliate. In the total U.S. trade data, the timing depends upon when the individual export document or import declaration on that transaction is collected. In addition, the total U.S. trade data are compiled on a calendar year basis, whereas the MNC data are reported by companies for either the calendar year or the closest fiscal year.

On the export side, the MNC data exclude goods which are charged to U.S. residents but shipped to foreign residents, such as military exports charged to the Department of Defense. Total U.S. exports as shown in this article have been adjusted to exclude transfers of goods under U.S. military grant programs and under U.S. military agency sales contracts but may include other exports charged to U.S. persons.

As noted earlier, the MNC data may reflect some doublecounting in cases where one U.S. reporter deals with a majority-owned foreign affiliate of another reporter included in the sample. For example, an export transaction may be reported by one U.S. reporter as an export by it to a foreigner other than its own MOFA and by a second U.S. reporter as an export to its MOFA by another U.S. supplier (i.e., by the first reporter in this example). The amount of such duplication is unknown but is probably not large.

Data on U.S. imports from majority-owned foreign affiliates, as already indicated, were obtained from affiliate sales data and include sales of both goods and services to U.S. residents. While the size of the service component

in the affiliate sales data is not known, it is believed to be small.

Data on imports by U.S. reporters from foreigners other than majority-owned affiliates should include imports of goods only. However, data on such imports—for both 1966 and 1970—were requested for the first time in the 1970 special survey and may reflect some "first-time" reporting defects.

Furthermore, the 1966 benchmark survey, from which most of the 1966 data on MNC-associated trade were drawn, was mandatory whereas the 1970 special survey was voluntary. This may have caused reporting biases, but their magnitude is not known.

Data on 1966 imports by U.S. reporters from foreigners other than MOFAs were not available from the 1966 benchmark survey. They were available from the 1970 special survey for the 298 U.S. reporters in the sample only; for U.S. reporters who were not in the sample but who were in the 1966 universe, they had to be estimated. They were estimated by assuming that the proportion these imports were of all MNC-associated imports in 1966 was the same for those MNCs not in the sample as for all MNCs in the benchmark universe. The resulting figure was \$1,620 million out of total imports associated with MNCs not in the sample of \$3,273 million (table 1). Alternative calculations give a range for estimated 1966 imports from unaffiliated foreigners associated with MNCs not in the sample of between \$1 billion and \$2 billion.